

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

United States Patent and Trademark
Office
(Box PCT)
Crystal Plaza 2
Washington, DC 20231
ÉTATS-UNIS D'AMÉRIQUE

in its capacity as elected Office

Date of mailing: 25 February 1999 (25.02.99)	
International application No.: PCT/JP98/03566	Applicant's or agent's file reference: 98-031-PCT
International filing date: 10 August 1998 (10.08.98)	Priority date: 14 August 1997 (14.08.97)
Applicant: YAMAMOTO, Junko et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International preliminary Examining Authority on:
28 December 1998 (28.12.98)☐ in a notice effecting later election filed with the International Bureau on:2. The election ☒ was
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer:

J. Zahra

Telephone No.: (41-22) 338.83.38

P C T

REC'D 13 SEP 1999

WIPO PCT

国際予備審査報告

(法第12条、法施行規則第56条)

[PCT36条及びPCT規則70]

出願人又は代理人 の書類記号 98-031-PCT	今後の手続きについては、国際予備審査報告の送付通知(様式PCT/ IPEA/416)を参照すること。	
国際出願番号 PCT/JP98/03566	国際出願日 (日.月.年) 10.08.98	優先日 (日.月.年) 14.08.97
国際特許分類(IPC) Int.Cl ⁸ C12Q 1/68		
出願人(氏名又は名称) 寶酒造株式会社		

1. 国際予備審査機関が作成したこの国際予備審査報告を法施行規則第57条(PCT36条)の規定に従い送付する。

2. この国際予備審査報告は、この表紙を含めて全部で 3 ページからなる。

☐ この国際予備審査報告には、附属書類、つまり補正されて、この報告の基礎とされた及び/又はこの国際予備審査機関に対してした訂正を含む明細書、請求の範囲及び/又は図面も添付されている。
(PCT規則70.16及びPCT実施細則第607号参照)
この附属書類は、全部で _____ ページである。

3. この国際予備審査報告は、次の内容を含む。

- I ☒ 国際予備審査報告の基礎
- II ☐ 優先権
- III ☐ 新規性、進歩性又は産業上の利用可能性についての国際予備審査報告の不作成
- IV ☐ 発明の単一性の欠如
- V ☒ PCT35条(2)に規定する新規性、進歩性又は産業上の利用可能性についての見解、それを裏付けるための文献及び説明
- VI ☐ ある種の引用文献
- VII ☐ 国際出願の不備
- VIII ☐ 国際出願に対する意見

国際予備審査の請求書を受理した日 28.12.98	国際予備審査報告を作成した日 25.08.99	
名称及びあて先 日本国特許庁(IPEA/JP) 郵便番号100-8915 東京都千代田区霞が関三丁目4番3号	特許庁審査官(権限のある職員) 新見 浩一	4N 9162
電話番号 03-3581-1101 内線 3488		

I. 国際予備審査報告の基礎

1. この国際予備審査報告は下記の出願書類に基づいて作成された。(法第6条(PCT 14条)の規定に基づく命令に
応答するために提出された差し替え用紙は、この報告書において「出願時」とし、本報告書には添付しない。
PCT規則70.16, 70.17)

☒ 出願時の国際出願書類

- ☐ 明細書 第 _____ ページ、 出願時に提出されたもの
明細書 第 _____ ページ、 国際予備審査の請求書と共に提出されたもの
明細書 第 _____ ページ、 _____ 付の書簡と共に提出されたもの
- ☐ 請求の範囲 第 _____ 項、 出願時に提出されたもの
請求の範囲 第 _____ 項、 PCT 19条の規定に基づき補正されたもの
請求の範囲 第 _____ 項、 国際予備審査の請求書と共に提出されたもの
請求の範囲 第 _____ 項、 _____ 付の書簡と共に提出されたもの
- ☐ 図面 第 _____ ページ/図、 出願時に提出されたもの
図面 第 _____ ページ/図、 国際予備審査の請求書と共に提出されたもの
図面 第 _____ ページ/図、 _____ 付の書簡と共に提出されたもの
- ☐ 明細書の配列表の部分 第 _____ ページ、 出願時に提出されたもの
明細書の配列表の部分 第 _____ ページ、 国際予備審査の請求書と共に提出されたもの
明細書の配列表の部分 第 _____ ページ、 _____ 付の書簡と共に提出されたもの

2. 上記の出願書類の言語は、下記に示す場合を除くほか、この国際出願の言語である。

上記の書類は、下記の言語である _____ 語である。

- ☐ 国際調査のために提出されたPCT規則23.1(b)にいう翻訳文の言語
☐ PCT規則48.3(b)にいう国際公開の言語
☐ 国際予備審査のために提出されたPCT規則55.2または55.3にいう翻訳文の言語
3. この国際出願は、ヌクレオチド又はアミノ酸配列を含んでおり、次の配列表に基づき国際予備審査報告を行った。

- ☐ この国際出願に含まれる書面による配列表
☐ この国際出願と共に提出されたフレキシブルディスクによる配列表
☐ 出願後に、この国際予備審査(または調査)機関に提出された書面による配列表
☐ 出願後に、この国際予備審査(または調査)機関に提出されたフレキシブルディスクによる配列表
☐ 出願後に提出した書面による配列表が出願時における国際出願の開示の範囲を超える事項を含まない旨の陳述書の提出があった
☐ 書面による配列表に記載した配列とフレキシブルディスクによる配列表に記載した配列が同一である旨の陳述書の提出があった。

4. 補正により、下記の書類が削除された。

- ☐ 明細書 第 _____ ページ
☐ 請求の範囲 第 _____ 項
☐ 図面 図面の第 _____ ページ/図

5. ☐ この国際予備審査報告は、補充欄に示したように、補正が出願時における開示の範囲を越えてされたものと認められるので、その補正がされなかったものとして作成した。(PCT規則70.2(c) この補正を含む差し替え用紙は上記1.における判断の際に考慮しなければならず、本報告に添付する。)

V. 新規性、進歩性又は産業上の利用可能性についての法第12条(PCT35条(2))に定める見解、それを裏付ける文献及び説明

1. 見解

新規性(N)

請求の範囲 1-16 有
請求の範囲 無

進歩性(I S)

請求の範囲 1-16 有
請求の範囲 無

産業上の利用可能性(I A)

請求の範囲 1-16 有
請求の範囲 無

2. 文献及び説明(PCT規則70.7)

請求の範囲1-16に記載された発明は国際調査報告に表示された文献及び当該発明に関連があると認められる文献に記載されておらず、かつ、それらの文献の記載を組み合わせることにより当業者にとって容易に発明できたものでもない。

47
Translation

PATENT COOPERATION TREATY

16.55

PCT

16.01
REM1

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

09/485298

Applicant's or agent's file reference 98-031-PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/JP98/03566	International filing date (day/month/year) 10 August 1998 (10.08.98)	Priority date (day/month/year) 14 August 1997 (14.08.97)
International Patent Classification (IPC) or national classification and IPC C12Q 1/68		
Applicant TAKARA SHUZO CO., LTD.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 3 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of _____ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 28 December 1998 (28.12.98)	Date of completion of this report 25 August 1999 (25.08.1999)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP98/03566

I. Basis of the report

1. With regard to the **elements** of the international application:*

- ☒ the international application as originally filed
- ☐ the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the claims:
 pages _____, as originally filed
 pages _____, as amended (together with any statement under Article 19
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the drawings:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/JP 98/03566

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-16	YES
	Claims		NO
Inventive step (IS)	Claims	1-16	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-16	YES
	Claims		NO

2. Citations and explanations

The inventions disclosed in Claims 1-6 are not disclosed in the documents cited in the international search report, nor could they be easily invented by a person skilled in the art by combining disclosures in these documents.

PCT

EP

US

国際調査報告

(法8条、法施行規則第40、41条)

[PCT18条、PCT規則43、44]

出願人又は代理人 の書類記号 98-031-PCT	今後の手続きについては、国際調査報告の送付通知様式(PCT/ISA/220)及び下記5を参照すること。	
国際出願番号 PCT/J P 98/03566	国際出願日 (日.月.年) 10.08.98	優先日 (日.月.年) 14.08.97
出願人(氏名又は名称) 寶酒造株式会社		

国際調査機関が作成したこの国際調査報告を法施行規則第41条(PCT18条)の規定に従い出願人に送付する。
この写しは国際事務局にも送付される。

この国際調査報告は、全部で 3 ページである。

☐ この調査報告に引用された先行技術文献の写しも添付されている。

1. ☐ 請求の範囲の一部の調査ができない(第I欄参照)。
2. ☐ 発明の単一性が欠如している(第II欄参照)。
3. ☐ この国際出願は、ヌクレオチド及び/又はアミノ酸配列リストを含んでおり、次の配列リストに基づき国際調査を行った。
 - ☐ この国際出願と共に提出されたもの
 - ☐ 出願人がこの国際出願とは別に提出したもの
 - ☐ しかし、出願時の国際出願の開示の範囲を越える事項を含まない旨を記載した書面が添付されていない
 - ☐ この国際調査機関が書換えたもの

4. 発明の名称は
 - ☒ 出願人が提出したものを承認する。
 - ☐ 次に示すように国際調査機関が作成した。

5. 要約は
 - ☒ 出願人が提出したものを承認する。
 - ☐ 第III欄に示されているように、法施行規則第47条(PCT規則38.2(b))の規定により国際調査機関が作成した。出願人は、この国際調査報告の発送の日から1カ月以内にこの国際調査機関に意見を提出することができる。

6. 要約書とともに公表される図は、
第 _____ 図とする。
 - ☐ 出願人が示したとおりである。
 - ☒ なし
 - ☐ 出願人は図を示さなかった。
 - ☐ 本図は発明の特徴を一層よく表している。

A. 発明の属する分野の分類 (国際特許分類 (IPC))

Int. Cl⁸ C 1 2 Q 1 / 6 8

B. 調査を行った分野

調査を行った最小限資料 (国際特許分類 (IPC))

Int. Cl⁸ C 1 2 Q 1 / 6 8

最小限資料以外の資料で調査を行った分野に含まれるもの

国際調査で使用した電子データベース (データベースの名称、調査に使用した用語)

WPI (DIALOG); BIOSIS (DIALOG)

C. 関連すると認められる文献

引用文献の カテゴリー*	引用文献名 及び一部の箇所が関連するときは、その関連する箇所の表示	関連する 請求の範囲の番号
Y	JP, 07-509368, A (ジエノブ・ローブ・インコーポレイテッド) 19. 10月. 1995 (19. 10. 95), & WO, 94/03472, A & EP, 587298, A & US, 5766849, A	1, 3, 4, 9, 10, 12, 16
Y	JP, 05-261000, A (エフ・ホフマン・ラ ロシュ アクション ゲゼルシャフト) 12. 10月. 1993 (12. 10. 93), & EP, 550883, A	1-16
Y	JP, 07-506245, A (ノース・ショア・ユバースィティ・ホスピタル・リサーチ・コーポレーション) 13. 7月. 1995 (13. 07. 95), & WO, 93/15225, A & EP, 651823, A & US, 5658764, A	1-16
PY	JP, 10-66596, A (メティン コルバン) 10. 3月. 1998 (10. 03. 98), & EP, 808906, A	1, 3, 4, 9, 10, 12, 16

☒ C欄の続きにも文献が列挙されている。☐ パテントファミリーに関する別紙を参照。

* 引用文献のカテゴリー

「A」特に関連のある文献ではなく、一般的技術水準を示すもの

「E」先行文献ではあるが、国際出願日以後に公表されたもの

「L」優先権主張に疑義を提起する文献又は他の文献の発行日若しくは他の特別な理由を確立するために引用する文献 (理由を付す)

「O」口頭による開示、使用、展示等に言及する文献

「P」国際出願日前で、かつ優先権の主張の基礎となる出願

の日の後に公表された文献

「T」国際出願日又は優先日後に公表された文献であって出願と矛盾するものではなく、発明の原理又は理論の理解のために引用するもの

「X」特に関連のある文献であって、当該文献のみで発明の新規性又は進歩性がないと考えられるもの

「Y」特に関連のある文献であって、当該文献と他の1以上の文献との、当業者にとって自明である組合せによって進歩性がないと考えられるもの

「&」同一パテントファミリー文献

国際調査を完了した日

20. 08. 98

国際調査報告の発送日

01.09.98

国際調査機関の名称及びあて先

日本国特許庁 (ISA/J P)

郵便番号 100-8915

東京都千代田区霞が関三丁目4番3号

特許庁審査官 (権限のある職員)

新見 浩一

4 B

9 1 6 2

電話番号 03-3581-1101 内線 3448

C (続き) . 関連すると認められる文献

引用文献の カテゴリー*	引用文献名 及び一部の箇所が関連するときは、その関連する箇所の表示	関連する 請求の範囲の番号
Y	Nucleic Acids Research Vol.24 No.24 (1996) Auer T. et al. 「Selective amplification of RNA utilizing the *nucleotide* *analog* dITP and Thermus thermophilus DNA polymerase」 p. 5021-5025	1-16



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 93 30 3122

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
D,Y	ANALYTICAL BIOCHEMISTRY vol. 196 , 1991 , NEW YORK US pages 80 - 83 BASSAM, B. ET AL 'fast and sensitive silver staining of DNA in polyacrylamide gels' * the whole document *	1-20	C12Q1/68 C12P19/34 C07H21/04
Y	PATENT ABSTRACTS OF JAPAN vol. 11, no. 60 (C-405)(2507) February 1987 & JP-A-61 219 399 (HITACHI LTD) 29 September 1986 * abstract *	1-20	
Y	WO-A-92 17611 (UNIV. TENNESSEE RES. CORP.) * the whole document *	1-20	
D,Y	ANALYTICAL BIOCHEMISTRY vol. 126, no. 2 , November 1982 , NEW YORK US pages 374 - 380 BEIDLER, J. ET AL 'ultrasensitive staining of nucleic acids with silver' * page 379, paragraph 3 *	1-20	TECHNICAL FIELDS SEARCHED (Int.Cl.5) C12Q
Y	ANALYTICAL BIOCHEMISTRY vol. 164, no. 5 , 1987 , NEW YORK US pages 514 - 520 BECK, S. 'colorimetric detected DNA sequencing' * the whole document *	1-20	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 28 April 1994	Examiner Osborne, H
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons * : member of the same patent family, corresponding document			

EPO FORM 1500 (12/92) (P04C01)



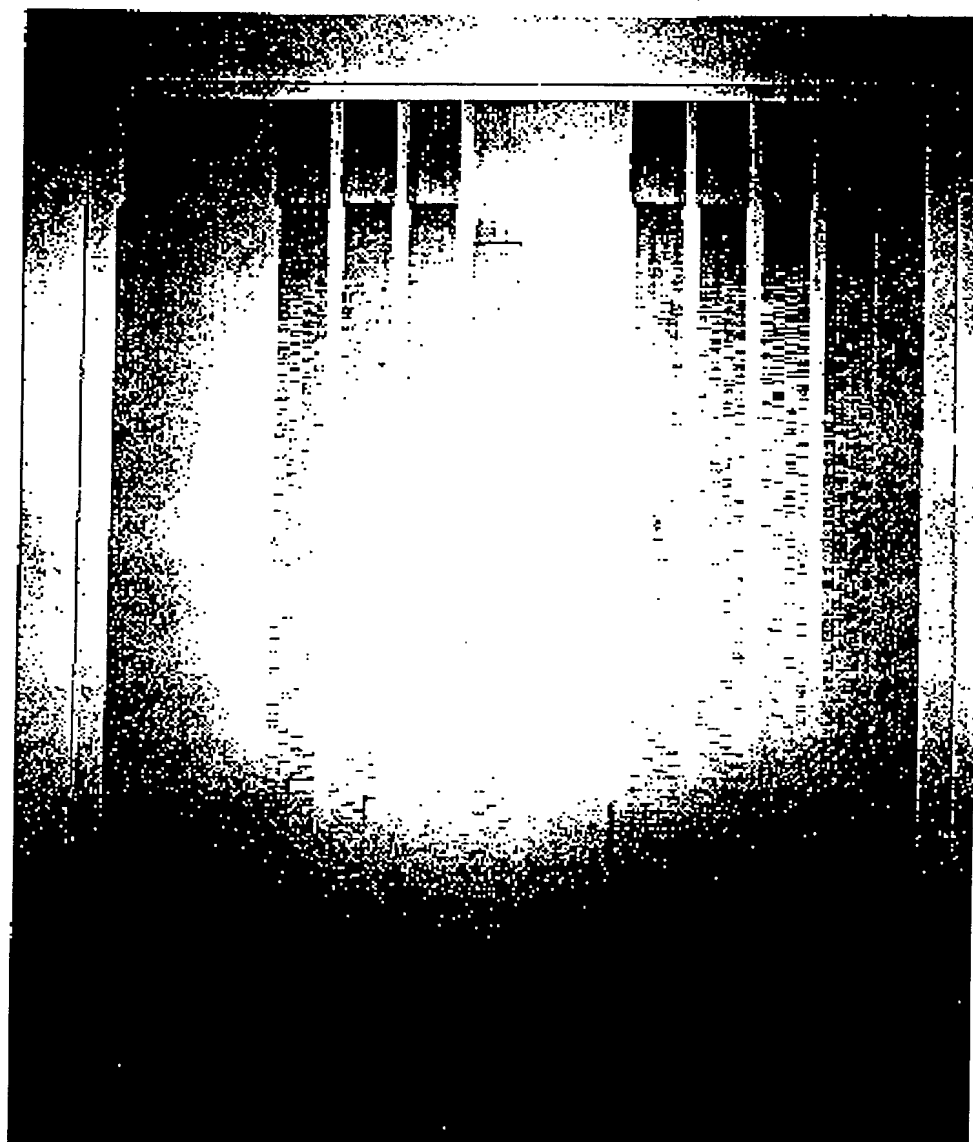
European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 93 30 3122

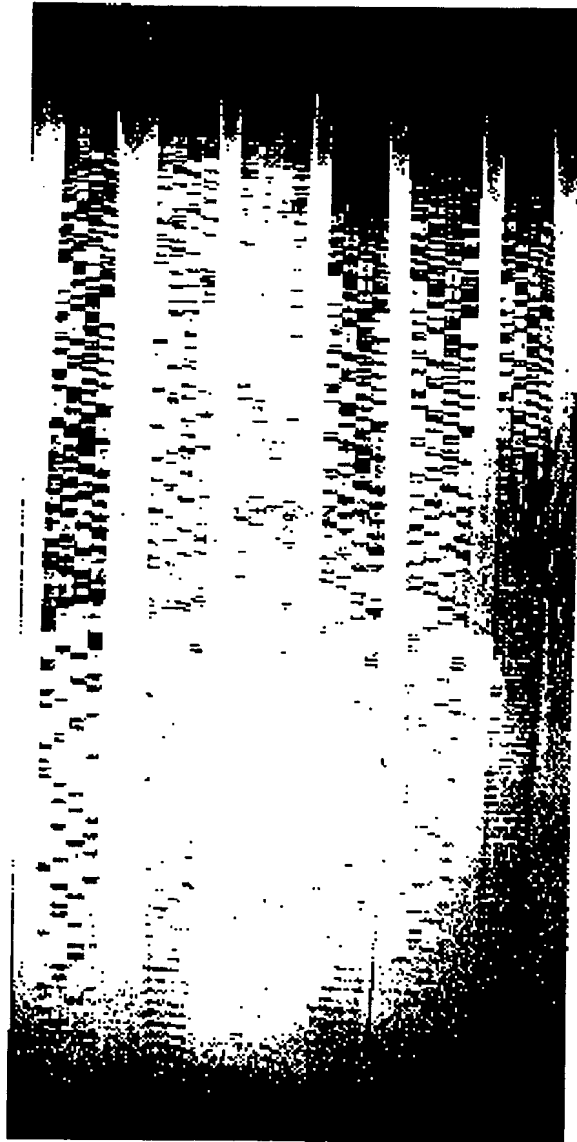
DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
A	NUCLEIC ACIDS RESEARCH. vol. 17, no. 6 , March 1989 , ARLINGTON, VIRGINIA US pages 2181 - 2186 RICHTERICH, P. 'non-radioactive chemical sequencing of biotin labelled DNA' * the whole document *	1-20	
A	WO-A-92 16653 (BIOPROBE SYSTEMS) * claims 1-10 *	1-20	
			TECHNICAL FIELDS SEARCHED (Int.Cl.5)
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 28 April 1994	Examiner Osborne, H
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons * : member of the same patent family, corresponding document			

EPO FORM 150 (01.92) (PSCN)



Samples 1 2 3 4 5 6 7 8

Fig. 1



Samples 1 2 3 4 5 6

Fig. 2



P.B.5818 - Patentlaan 2
2280 HV Rijswijk (ZH)
☎ +31 70 340 2040
TX 31651 epo nl
FAX +31 70 340 3016

Europäisches
Patentamt

Zweigstelle
in Den Haag
Recherchen-
abteilung

European
Patent Office

Branch at
The Hague
Search
division

Office européen
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recherche

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26. JULI 2001

Frist:

Datum/Date

26.07.01

Zeichen/Ref./Réf. T1017EU/sch-st	Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°. 98936732.1-2116-JP9803566
Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire Takara Shuzo Co, Ltd.	

COMMUNICATION

The European Patent Office herewith transmits as an enclosure the European search report for the above-mentioned European patent application.

If applicable, copies of the documents cited in the European search report are attached.

☒ Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.





DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	US 5 618 703 A (GELFAND DAVID H ET AL) 8 April 1997 (1997-04-08) * column 18, line 15 - line 30; claims 1,5 *	1,3-8, 10,12-15	C12Q1/68
Y	* column 11, line 34 - line 43 * * column 6, line 34 * * column 22, line 23 - line 41 * * column 17, line 63 - column 18, line 14 *	1-4, 9-11,16	
Y	----- CHESTER N ET AL: "DIMETHYL SULFOXIDE-MEDIATED PRIMER TM REDUCTION: A METHOD FOR ANALYZING THE ROLE OF RENATURATION TEMPERATURE IN THE POLYMERASE CHAIN REACTION" ANALYTICAL BIOCHEMISTRY,US,ACADEMIC PRESS, SAN DIEGO, CA, vol. 209, no. 2, 1 March 1993 (1993-03-01), pages 284-290, XP000349766 ISSN: 0003-2697 * abstract * * page 287, column 2, paragraph 2 *	1-4, 9-11,16	
A	SIDHU MANINDER K ET AL: "Dimethyl sulfoxide improves RNA amplification." BIOTECHNIQUES, vol. 21, no. 1, 1996, pages 44-47, XP000999068 ISSN: 0736-6205 * page 46, column 2, paragraph 2 - page 47, column 1, paragraph 1 * ----- -/--	1-4, 9-11,16	
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
Place of search MUNICH		Date of completion of the search 17 July 2001	Examiner Tilkorn, A-C
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	SEELA F ET AL: "7-DEAZAPURINE CONTAINING DNA: EFFICIENCY OF C7GDP, C7ADTP AND C7IDTP INCORPORATION DURING PCR-AMPLIFICATION AND PROTECTION FROM ENDODEOXYRIBONUCLEASE HYDROLYSIS" NUCLEIC ACIDS RESEARCH,GB,OXFORD UNIVERSITY PRESS, SURREY, vol. 20, no. 1, 1992, pages 55-61, XP002044088 ISSN: 0305-1048 * the whole document *	1-8, 10-15	
A	INNIS M A: "PCR WITH 7 DEAZA-2'-DEOXYGUANOSINE TRIPHOSPHATE" INNIS, M. A., ET AL. (ED.). PCR PROTOCOLS: A GUIDE TO METHODS AND, 1990, pages 54-59, XP000999096 USA;LONDON, ENGLAND, UK. ILLUS. ISBN 0-12-372181-4(PAPER); ISBN 0-12-372180-6(CLOTH). 1990 * the whole document *	1-8, 10-15	
X	EP 0 610 615 A (PROMEGA CORP) 17 August 1994 (1994-08-17) * claim 16 *	10,14	TECHNICAL FIELDS SEARCHED (Int.Cl.6)
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
Place of search MUNICH		Date of completion of the search 17 July 2001	Examiner Tilkorn, A-C
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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EPO FORM 1503 03/82 (P04C04)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 98 93 6732

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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17-07-2001

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5618703 A	08-04-1997	US 5310652 A	10-05-1994
		US 5322770 A	21-06-1994
		US 4889818 A	26-12-1989
		US 5641864 A	24-06-1997
		US 5693517 A	02-12-1997
		US 5561058 A	01-10-1996
		AT 169337 T	15-08-1998
		AT 151112 T	15-04-1997
		AU 681387 B	28-08-1997
		AU 6329694 A	01-09-1994
		AU 646430 B	24-02-1994
		AU 7176491 A	24-07-1991
		AU 656315 B	02-02-1995
		AU 7244491 A	24-07-1991
		CA 2071196 A	23-06-1991
		CA 2071213 A	23-06-1991
		DE 69030386 D	07-05-1997
		DE 69030386 T	09-10-1997
		DE 69032543 D	10-09-1998
		DE 69032543 T	15-04-1999
		DK 506825 T	03-05-1999
		DK 506889 T	22-09-1997
		EP 0506825 A	07-10-1992
		EP 0506889 A	07-10-1992
		ES 2121777 T	16-12-1998
		ES 2100945 T	01-07-1997
		GR 3023862 T	30-09-1997
		JP 2790448 B	27-08-1998
		JP 9224682 A	02-09-1997
		JP 2774192 B	09-07-1998
		JP 5504887 T	29-07-1993
		JP 2968585 B	25-10-1999
		JP 5505105 T	05-08-1993
		SG 46627 A	20-02-1998
		US 5407800 A	18-04-1995
		WO 9109950 A	11-07-1991
		WO 9109944 A	11-07-1991
		US 5618711 A	08-04-1997
		US 5789224 A	04-08-1998
		AT 176002 T	15-02-1999
		AU 665338 B	04-01-1996
		AU 8532791 A	18-02-1992
		CA 2087724 A	25-01-1992
		DE 69130800 D	04-03-1999
		DE 69130800 T	16-09-1999
		DK 540693 T	13-09-1999

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

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17-07-2001

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5618703 A		EP 0540693 A	12-05-1993
		ES 2128323 T	16-05-1999
		GR 3029987 T	30-07-1999
		JP 6501612 T	24-02-1994
EP 0610615 A	17-08-1994	AT 168136 T	15-07-1998
		AU 671820 B	12-09-1996
		AU 3693693 A	18-08-1994
		DE 69319573 D	13-08-1998
		DE 69319573 T	18-03-1999
		JP 6245799 A	06-09-1994
		US 5523206 A	04-06-1996
		US 5654149 A	05-08-1997

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP98/03566

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁶ C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁶ C12Q1/68

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI (DIALOG), BIOSIS (DIALOG)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP, 07-509368, A (Gen-Probe Inc.), 19 October, 1995 (19. 10. 95) & WO, 94/03472, A & EP, 587298, A & US, 5766849, A	1, 3, 4, 9, 10, 12, 16
Y	JP, 05-261000, A (F. Hoffman-La Roche AG.), 12 October, 1993 (12. 10. 93) & EP, 550883, A	1-16
Y	JP, 07-506245, A (North Shore University Hospital Research Corp.), 13 July, 1995 (13. 07. 95) & WO, 93/15225, A & EP, 651823, A & US, 5658764, A	1-16
PY	JP, 10-66596, A (Metin Colpan), 10 March, 1998 (10. 03. 98) & EP, 808906, A	1, 3, 4, 9, 10, 12, 16

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search
20 August, 1998 (20. 08. 98)

Date of mailing of the international search report
1 September, 1998 (01. 09. 98)

Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP98/03566

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	Nucleic Acids Research Vol. 24 No. 24 (1996) Auer T. et al., "Selective amplification of RNA utilizing the *nucleotide* *analog* dITP and <i>Thermus</i> <i>thermophilus</i> DNA polymerase" p.5021-5025	1-16

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US93/00721**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(5) :C12Q 1/68

US CL :435/6

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 435/6, 536/23.5, 536/27

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
BIOSIS, CAS REGISTRY, USPAT (APS)**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	Science, Volume 251, No. 4989, issued 04 January 1991, Heitz et al. "Isolation of Sequences That Span the Fragile X and Identification of a Fragile X-Related 'CpG Island," p. 1236-1239, see entire document	1-16
Y,P	US, A, 5,091,310 (Innis) 25 February 1992, col. 4 lines 3-21.	1-16
Y	Science, Volume 252, issued 21 June 1991, "Mapping of DNA Instability at the Fragile X to a Trinucleotide Repeat Sequence p(CCG)n," p. 1711-14, 1991, see entire document.	9-16

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

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"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

22 MARCH 1993

Date of mailing of the international search report

31 MAR 1993

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